

Notice of Allowability

Application No.

09/725,470

Examiner

Timothy L Rude

Applicant(s)

LEE ET AL.

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 27 April 2004.
2. ☒ The allowed claim(s) is/are 1,3,4,6-10,12-14 and 16-23.
3. ☒ The drawings filed on 30 November 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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DETAILED ACTION

Claims

Claims 5, 11, 15, and 24-27 are canceled. Claims 1, 3, 4, 6, 8, 12, 13, and 23 are amended.

Allowable Subject Matter

Claims 1, 3, 4, 6-10, 12-14, and 16-23 are allowed.

The following is an examiner's statement of reasons for allowance:

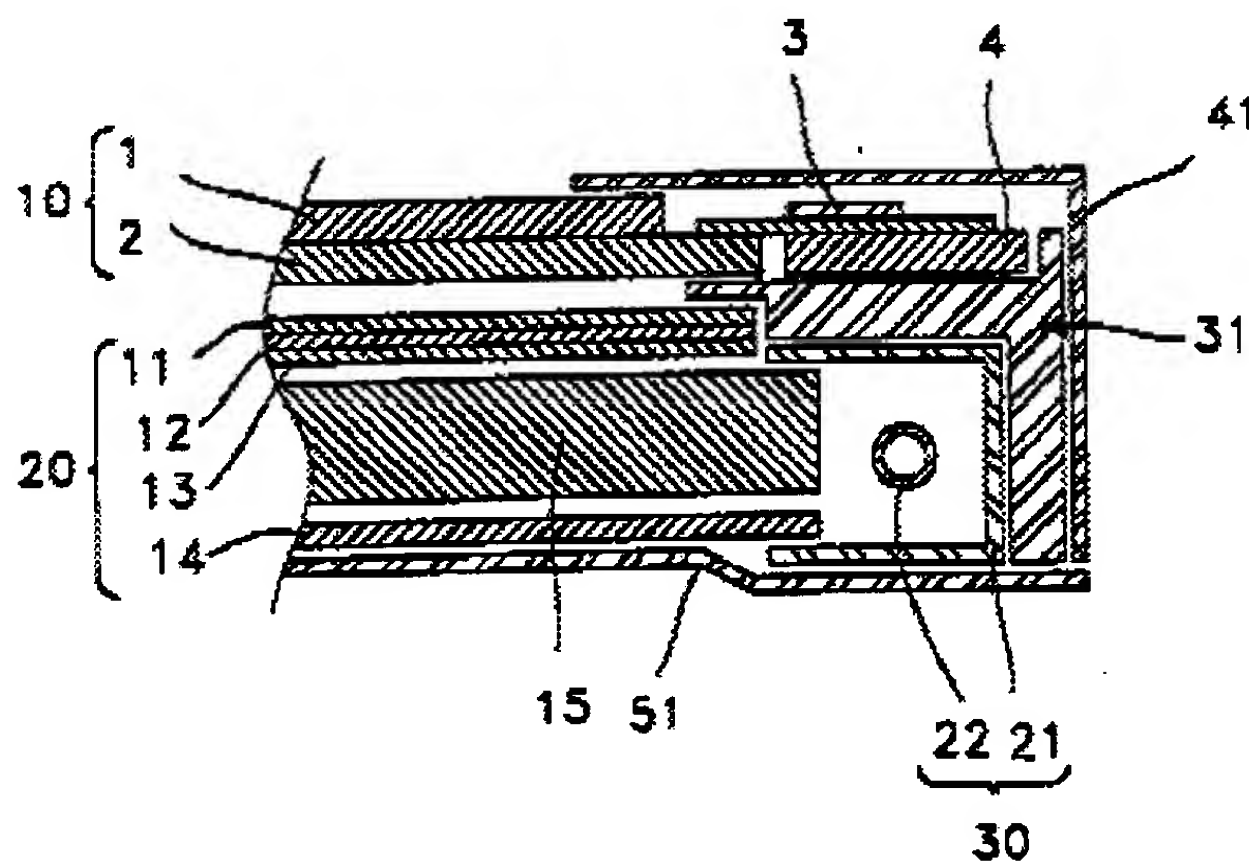
Claim 1 is allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a liquid crystal display device as claimed comprising: a mold frame having a receiving space and sidewalls surrounding the receiving space; a receiving recess formed on an outer side surface of the sidewall and receiving the second portion of the flexible circuit board.

The closest combination is Lee USPAT 5,966,191 in view of Hashimoto USPAT 5,442,470.

Lee discloses in Figure 2 a liquid crystal display (LCD) device, comprising: a liquid crystal display panel, 1 and 2, and a flexible printed circuit (not labeled item between 2 and 3), attached to said liquid crystal display (LCD) panel, for applying driving signals to said liquid crystal display panel; a light guide plate and lamp

assembly, 15 and 30, (Applicant's back light assembly) for providing a light to said LCD panel; a mold frame for receiving said liquid crystal display panel and said back light assembly; a chassis, 41, coupled to said mold frame, for fixing said liquid crystal display panel and said back light assembly to said mold frame.

FIG. 2



Lee does not explicitly disclose a support means for supporting said flexible circuit board towards said mold frame.

Hashimoto discloses (summary of the invention, col. 2, line 31 through col. 3, line 26) an embodiment shown in Figure 4 (col. 5, line 18 through col. 7, line 52).

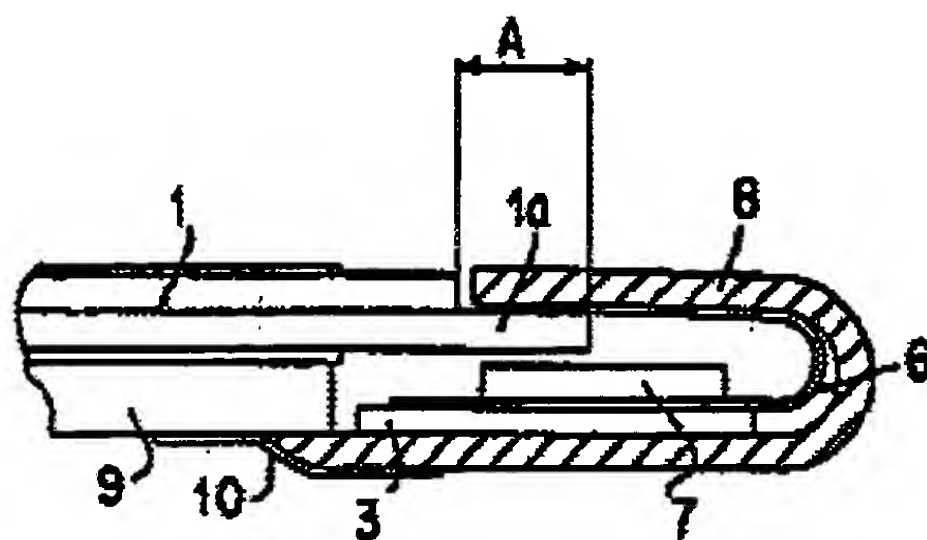


FIG. 4

Figure 4 of Hashimoto shows a liquid crystal display panel comprising: a flexible printed circuit, 6, which is attached to the liquid crystal display panel, for applying driving signals to said liquid crystal display panel which is curved into a recess which is deeper in the upper end of the outer side (Applicant's receiving recess) to receive a protruding portion, 7, in order to minimize weight and size (summary of the invention, col. 2, line 31 through col. 3, line 26) and to protect the circuits (col. 5, lines 4-17); and a frame member, 8, that has a moderate level of resiliency for nipping the liquid crystal display panel, 1, and the circuit board, 3, (col. 5, lines 58-68) (Applicant's support member for supporting the flexible circuit board towards the mold frame) to provide greater durability and resistance to vibration and impacts.

However Lee in view of Hashimoto does not render obvious a mold frame having a receiving space and sidewalls surrounding the receiving space; a receiving recess formed on an outer side surface of the sidewall and receiving the second portion of the flexible circuit board.

Claims 6, 8, and 13 are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a liquid crystal display device as claimed comprising: the specific design features of engaging holes of predetermined depth in an engaging recess, engaging plates on both sides of the fixing body, a penetrating hole in a fixing film, a number of circuit boards protruded and integral with a plurality of fixing films.

The closest combination is Lee in view of Hashimoto, but they do not disclose nor render obvious the level of design specificity of engaging holes of predetermined depth in an engaging recess, engaging plates on both sides of the fixing body, a penetrating hole in a fixing film, a number of circuit boards protruded and integral with a plurality of fixing films.

Claims 3, 4, 7, 9, 10, 12, 14, and 16-23 are allowable because they directly or indirectly depend from claims with allowable subject matter above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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